more than 15 percent of the onions in a white lot are appreciably stained. Onions with adhering dirt or other foreign matter shall be judged on the same basis as stained onions:

- (g) Mechanical when any cut extends deeper than one fleshy scale, or when any bruise breaks a fleshy scale;
- (h) Tops when more than 30 percent of the onions in a lot have tops 3 inches or more in length;
- (i) New roots when most roots on an individual onion have grown to a length of 1 inch or more;
- (j) Dry roots when practically all roots are 2 inches or more in length;
- (k) Translucent scales when more than the equivalent of two entire outer fleshy scales have a watersoaked condition; and.
- (1) Watery scales when more than the equivalent of the entire outer fleshy scale is affected by an off-color, watersoaked condition. The off-color must be of some shade of brown or yellow.

§51.3210 Serious damage.

Serious damage unless otherwise specifically defined in this section, means any defect which seriously affects the appearance, or the edible or shipping quality of the onions. Any one of the following defects, or any combination of defects the seriousness of which exceeds the maximum allowed for any one defect, shall be considered as serious damage:

- (a) Seedstems when more than $\frac{1}{2}$ inch in diameter;
- (b) Dry sunken areas when extending deeper than one fleshy scale, or when affecting an area equivalent to that of a circle 1 inch in diameter on an onion 2¾ inches in diameter, or correspondingly lesser or greater areas on smaller or larger onions:
- (c) Sprouting when any visible sprout is more than ½ in length;
- (d) Staining, dirt or foreign material when more than 25 percent of the onions in any lot are badly stained. Onions with adhering dirt or other foreign matter shall be judged on the same basis as stained onions;
- (e) Mechanical when any cut extends deeper than two fleshy scales, or when cuts seriously damage the appearance of the onion; and,

(f) Watery scales when more than the equivalent of two entire outer fleshy scales are affected by an off-colored, watersoaked condition. The off-color must be of some shade of brown or yellow.

§51.3211 Diameter.

Diameter means the greatest dimension of the onion at right angles to a line running from the stem to the root.

METRIC CONVERSION TABLE

§51.3212 Metric conversion table.

Inches	Millimeters (mm)
1/8	3.2
1/4	6.4
3/8	9.5
1/2	12.7
5/8	15.9
3/4	19.1
7/8	22.2
1	25.4
11/4	31.8
1½	38.1
13/4	44.5
2	50.8
2½	63.5
23/4	69.9
3	76.2
3½	88.9
4	101.6

Subpart—United States Standards for Grades of Potatoes for Processing ¹

SOURCE: 48 FR 10802, Mar. 15, 1983, unless otherwise noted.

§51.3410 Grades.

- (a) "U.S. No. 1 Processing" consists of potatoes which meet the following requirements:
 - (1) Basic requirements:
 - (i) Similar varietal characteristics;
 - (ii) Moderately firm; and,
 - (iii) Fairly well shaped.
 - (2) Free from:
 - (i) Freezing or freezing injury;
 - (iii) Blackheart;
 - (iii) Late Blight Tuber Rot;
 - (iv) Southern Bacterial Wilt;
 - (v) Bacterial Ring Rot;
 - (vi) Insects, worms or larvae;

¹Compliance with the provisions of these standards shall not excuse failure to comply with provisions of applicable Federal or State laws.

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- (vii) Soft rot and wet breakdown; and,
- (viii) Loose sprouts, dirt and foreign material.
 - (3) Free from damage by any cause.
- (4) Size. Unless otherwise specified, individual potatoes shall be not less than 2 inches in diameter or 4 ounces in weight. Percentage(s) of a larger size(s) and/or a maximum size may be specified.
- (b) "U.S. No. 2 Processing" consists of potatoes or usable pieces of potatoes which meet the following requirements:
 - (1) Basic requirements:
 - (i) Similar varietal characteristics;
 - (ii) Moderately firm; and,
 - (iii) Not seriously misshapen.
 - (2) Free from:
 - (i) Freezing or freezing injury;
 - (ii) Blackheart:
 - (iii) Late Blight Tuber Rot;
 - (iv) Southern Bacterial Wilt;
 - (v) Bacterial Ring Rot;
 - (vi) Insects, worms or larvae;
- (vii) Soft rot and wet breakdown; and.
- (viii) Loose sprouts, dirt and foreign material.
- (3) Free from serious damage by any cause.
- (4) Size. Unless otherwise specified, whole potatoes shall be not less than 1½ inches in diameter, or usable pieces shall be not less than 4 ounces in weight. Percentage(s) of a larger size(s) and/or maximum size may be specified.

§51.3411 Usable piece.

- "Usable Piece" means that portion of the potato remaining after trimming, or as it occurs in the sample:
 - (a) Not have any unusable material;
- (b) Unless otherwise specified, weigh at least 4 ounces; and,
- (c) Must have at least 50% of peel remaining after trimming.

§51.3412 Unusable material.

"Unusable Material" consists of defective portions of potatoes, and potatoes which are frozen, affected by freezing injury, soft rot, wet breakdown, insects, worms, larvae, Blackheart, Late Blight Tuber Rot, Southern Bacterial Wilt, Bacterial Ring Rot, or which are seriously damaged by internal defects.

§51.3413 Size.

- (a) The minimum size, maximum size or range in size may be specified in connection with the grade in terms of diameter or weight.
- (b) Diameter means the greatest dimension in terms of inches or fractions of an inch measured at right angles to the longitudinal axis, without regard to the position of the stem-end.
- (c) Weight means the minimum or maximum weight measured in terms of whole ounces. When a maximum weight is specified, the potato shall not be considered as oversize until it weighs the next higher ounce.

§51.3414 Application of standards.

In the application of these standards to determine the percentages of potatoes in any lot which meet the requirements of the respective grades or size categories, tolerances do not apply. However, for lots which are graded or pre-sorted for size or quality, offered for inspection and required to meet one of the grades, the following tolerances, by weight, are provided:

- (a) For defects:
- (1) U.S. No. 1 Processing. 10 percent for potatoes which fail to meet the requirements of this grade including not more than one-half of this tolerance, or 5 percent, for serious damage by any means, including therein not more than 2 percent for potatoes which are frozen or affected by soft rot or wet breakdown.
- (2) U.S. No. 2 Processing. 10 percent for potatoes which fail to meet the requirements of this grade including not more than one-half of this tolerance, or 5 percent, for potatoes which are seriously damaged by internal defects occurring entirely within the vascular ring, including therein not more than 2 percent for potatoes which are frozen or affected by soft rot or wet breakdown.
- (b) For loose sprouts, dirt and foreign material: 2 percent.
 - (c) For off-size:
- (1) Undersize. 3 percent when the minimum size specified is less than 2½ inches in diameter or less than 5 ounces in weight; and 5 percent when the minimum size specified is 2½ inches or more in diameter or 5 ounces or more in weight.